

ATTACHMENT B Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) Method for ~~the~~ interactive control of a plastics material injection molding machine, where, via an input unit ~~(10)~~, which is provided with actuating fields, operating parameters necessary for ~~the~~ an workingoperating sequence of a machine are input, in a form which prompts ~~the~~ an operator, into a data processing unit ~~(12)~~ which stores these operating parameters, and subsequently one or more operating sequences are carried out in accordance with the stored operating parameters, wherein a data set covering ~~the~~ basic rules of the workingoperating sequence of the machine is recorded in the data processing unit ~~(12)~~ and, by using the data set, as a result, the operator is provided on a surface ~~(16)~~ with visualization of a selected choice of input possibilities, based on ~~the~~ a machine configuration and ~~the~~ a machine environment, for additional parts of the workingoperating sequence that can be added in a compatible manner into the existing parts of the workingoperating sequence, wherein for manual input and/or for input by means of a manipulator ~~(38)~~, the input unit ~~(10)~~ makes available to the operator on the surface ~~(16)~~ a selected choice of actuating fields corresponding to the additional parts of the operating sequence and for navigation on a navigation surface statically arranged on the surface ~~(16)~~,
characterized wherein ~~in that~~ the navigation surface ~~(20)~~ comprising at least three lines or three columns of actuating and input fields is hierarchical from line to line or column to column, and is represented on the surface ~~(16)~~ with a plurality of navigation levels associated with one another.

2. (Currently Amended) Method according to ~~one of the previous claims~~ 1, characterized wherein ~~in that~~ the actuating fields are imaged as input fields ~~(14)~~.

3. (Currently Amended) Method according to claim 1 ~~or 2~~, characterized wherein ~~in that~~ the hierarchical navigation surface ~~(20)~~ is represented with three lines.

4. (Currently Amended) Method according to ~~one of the previous claims 1,~~
~~characterized wherein in that~~ a parameter region (22) is represented on the surface (16)
for the numeric and/or graphic representation of operating parameters.

5. (Currently Amended) Method according to ~~one of the previous claim 1s,~~
~~characterized wherein in that~~ in addition to the navigation levels, a sequence editor (24),
~~which represents~~ the operating sequence in a schematic manner, is represented on
the surface (16).

6. (Currently Amended) Method according to ~~one of the previous claims 1,~~
~~characterized wherein in that~~ the operating sequence comprises sequence symbols and
when a sequence symbol (26) is tapped, the parameter images associated with the
sequence symbol (26) are displayed on the respective navigation level.

7. (Currently Amended) Method according to ~~one of the previous claims 1,~~
~~characterized wherein in that~~, the navigation levels comprise at least one top navigation
level and at least one bottom navigation level and when three navigation levels are
provided, the at least one top navigation levels are represented symbolically in one
line, whilst the at least one bottom navigation level is represented completely in the
additional lines.

8. (Currently Amended) Method according to ~~one of the previous claims 1,~~
~~characterized wherein in that~~ the operating sequence comprises sequence symbols and
in the event of an alarm, the sequence symbols (26) of the working sequence
relating to the alarm are identified and ~~in that wherein~~ tapping the sequence symbols
leads to the representation of the a relevant parameter region.

9. (Currently Amended) Method according to ~~one of the previous claims 1,~~
~~characterized wherein in that~~ favorite fields (32) are preset or are presettable on the

surface (16) by the user and when actuated these favorite fields lead to a jump, independent of the navigation, to a preset or presettable parameter group.

10. (Currently Amended) Method according to claim 9, characterized wherein in that when the favorite field (32) is actuated, the parameter image edited last in the associated parameter group is displayed.

11. (Currently Amended) Method according to ~~one of the previous claims 1,~~ characterized wherein in that tables (34) are represented on the surface (16) for the inputting of operating parameters and in that wherein, from these, a preferably non-editable graphic representation of the required values converted therefrom is generated.

12. (Currently Amended) Method according to ~~one of the previous claims 1,~~ characterized wherein in that an editable input diagram (36) is represented on the surface (16).

13. (Currently Amended) Method according to claim 11 or 12, characterized wherein in that the representation of the input of the operating parameters for the various directions of axes displacement of the axes is effected in the direction of axes displacement of the axes.

14. (Currently Amended) Method according to ~~one of the previous claims 1,~~ characterized wherein in that the method is carried out on a cyclically operating plastics material injection molding machine.

15. (Currently Amended) Apparatus for the interactive control of a plastics material injection molding machine, having

- a data processing unit (12),
- an input unit (10) with fields arranged on a surface (16) for the manual input and/or for the input by means of a manipulator (38), by means of which fields, in a form which prompts the an operator, the operating parameters necessary for the an

operating sequence of the machine can be input into the data processing unit (12) which stores the operating parameters for the subsequently carrying out of one or more operating sequences in accordance with the stored operating parameters, wherein the fields are actuating fields for navigation on a navigation surface statically arranged on the surface (16),

- a data set recorded in the data processing unit (12) and covering the basic rules of the operating sequence of the machine,
- using the data set and as a result, a selected choice, offered to the operator displayed on a surface (16), of possible input possibilities, based on the machine configuration and machine environment, for additional parts of the operating sequence that can be added in a compatible manner into the existing parts of the operating sequence,

characterized wherein in that the navigation surface (20) comprises at least three lines or at least three columns of actuating and input fields and is hierarchical from line to line or column to column and comprises a plurality of navigation levels associated with one another.

16. (Currently Amended) Apparatus according to claim 15, characterized wherein in that the actuating fields are imaged as input fields (14).

17. (Currently Amended) Apparatus according to claim 15 or 16, characterized wherein in that the hierarchical navigation surface (20) includes three lines.

18. (Currently Amended) Apparatus according to one of claims 15 to 17, characterized wherein in that a parameter region (22) is provided on the surface (16) for the numeric and/or graphic representation of the operating parameters.

19. (Currently Amended) Apparatus according to one of claims 15 to 18, characterized wherein in that in addition to the navigation levels, a sequence editor (24)

representing the operating sequence in a schematic manner is provided on the surface (17).

20. (Currently Amended) Apparatus according to ~~one of claims 15 to 19~~, ~~characterized wherein in that~~, the navigation levels comprise at least one top navigation level and at least one bottom navigation level and when three navigation levels are provided, ~~the sequence~~ symbols for the at least one top navigation level ~~is are~~ provided in one line, whilst ~~the elements of the~~ at least one bottom navigation level where necessary are provided completely in the additional lines.

21. (Currently Amended) Apparatus according to ~~one of the previous claims 15 to 20~~, ~~characterized wherein in that~~ identification means are provided for identifying sequence symbols ~~(26)~~ of the operating sequence related to an alarm

22. (Currently Amended) Apparatus according to ~~one of claims 15 to 21~~, ~~characterized wherein in that~~ preset favorite fields ~~(32)~~ or favorite fields ~~(32)~~ that are presettable by the user are provided on the surface ~~(16)~~, said favorite fields being provided as jump keys for a jump independent of the navigation to a preset or presettable parameter group.

23. (Currently Amended) Apparatus according to claim 22, ~~characterized wherein in that~~ a linking of the jump keys with ~~the a~~ parameter image last edited within the associated parameter group is provided.

24. (Currently Amended) Apparatus according to ~~one of claims 15 to 23~~, ~~characterized wherein in that~~ a non-editable graphic representation of the required values converted from the input parameters and/or an editable input diagram ~~(36)~~ is provided on the surface ~~(16)~~.

25. (Currently Amended) Data carriers having a program for the accomplishment of the method according to ~~one of claims 1 to 14~~.